What is claimed is:

1. In a jam head rotatable around at least two separate axes comprising a first part rotatable around a first axis and a second part rotatably connected to said first part and rotatable around a second axis, a viewing port in said first part for viewing an object, at least one reflecting surface for conveying an image through said port, a camera optically connected via said at least one reflecting surface to said port, the improvement comprising a unitary infrared transmitting glass fiber of constant core diameter passing from the laser to and through said first and said second parts for conveying an energetic infrared optical signal and an exit port through which the optical signal passes.

2. The jam head of claim 1 including at least one spool structure associated with said jam head for storing slack in said fiber in response to the rotary action of at least one of said parts.

3. The jam head of claim 2 including at least one collimating lens in said first part connected to said fiber for collimating the signal passing through said fiber and a tracking sensor mounted on said jam head.

4. The jam head of claim 3 wherein said at least one reflective surface is disposed in said first part, said camera is located in said second part and said tracking sensor is mounted on said first part.

5. The jam head of claim 4 wherein one spool structure is secured to said first part and accommodates storage of fiber slack caused by rotation of said first part and wherein a second spool structure is secured to said second part and accommodates storage of fiber slack caused by rotation of said second part.

6. The jam head of claim 4 wherein said at least one reflecting surface comprises two spaced optically connected mirrors for conveying an image of the object from said viewing port to said camera.

7. The jam head of claim 6 including a connection on said camera for conveying a signal outside of said part.

8. The jam head of claim 7 including a transparent dome which serves as said viewing port.

9. The jam head of claims 7 including a laser aperture in said first part disposed in proximity to said collimating lens through which passes the energetic optical signal from said fiber.

10. The jam head of claim 9 wherein said fiber has optical transmission loss of less than about 0.8 dB/m, is a solid core fiber with the core being $As_{39} S_{61}$ glass and the clad being $As_{38} S_{62}$ glass.

11. The jam head of claim 9 wherein said fiber has optical transmission of less than about 0.8 dB/m.

12. The jam head of claim 11 wherein said fiber is a photonic band gap hollow core fiber comprising an axial hollow core 2-200 microns in diameter, an axial microstructured region 5-500 microns thick, and a solid axial region 5-500 microns thick around and in contact with said microstructured region; the microstructured region has air fill fraction of 30-90 % and comprises a plurality of axial openings from a fraction of a micron to 10 microns in diameter with a center-to-center spacing of 1-12 microns arranged in 4-5 courses around the hollow core in a hexagonal pattern.

13. A protection system mounted on a movable platform comprising a detector for locating a

threat; an electronic and control system connected to said detector for receiving a signal from said detector; a laser connected to said electronic and control system; and a jam head including at least two independently rotatable parts and a tracking scanner connected to said laser and to said electronic and control system for sending a laser burst at the threat in order to disable/disorient same, said jam head comprising a unitary glass fiber of constant core diameter passing through said first and said second parts for conveying an energetic optical signal and an exit port through which the optical signal passes.

14. The protection system of claim 13 including in said jam head at least one spool structure associated with said jam head for storing slack in said fiber in response to the rotary action of at least one of said parts.

15. The protection system of claim 14 including in said jam head at least one collimating lens in said first part connected to said fiber for collimating the signal passing through said fiber.

16. The protection system of claim 15 wherein said at least one reflective surface is disposed in said first part and said camera is located in said second part.

17. The protection system of claim 16 wherein one spool structure is secured to said first part and accommodates storage of fiber slack caused by rotation of said first part and wherein a second spool structure is secured to said second part and accommodates storage of fiber slack caused by rotation of said second part.

18. The protection system of claim 17 wherein said at least one reflecting surface comprises two spaced optically connected mirrors for conveying an image of the object from said viewing port to said camera.

19. The protection of claim 18 including a connection on said camera for connecting a signal outside of said part.

20. The protection system of claim 19 including a transparent dome which serves as said viewing port.

21. The protection system of claim 18 including a laser aperture in said first part disposed in proximity to said collimating lens through which passes the energetic optical signal from said fiber.

22. The protection system of claim 21 wherein said fiber has optical transmission loss of less than about 0.8 dB/m, is a solid core fiber with the core being $As_{39}$ $S_{61}$ glass and the clad being $As_{38}$ $S_{62}$ glass.

23. The protection system of claim 21 wherein said fiber has optical transmission of less than about 0.8 dB/m.

24. The protection system of claim 21 wherein said fiber is a photonic band gap hollow core fiber comprising an axial hollow core 2-200 microns in diameter, an axial microstructured region about 15 microns thick, and a solid axial region 5-500 microns thick around and in contact with said microstructured region; the microstructured region has air fill fraction of 30-90 % and comprises a plurality of axial openings from a fraction of a micron to 10 microns in diameter with a center-to-center spacing of 1-12 microns arranged in 4-5 courses around the hollow core in a hexagonal pattern.